

REMARKS

The Office Action of September 25, 2006 has been carefully considered.

Regarding the informalities, a new Figure 2 has been added to the application showing beam 46 and lens 82. The correct designation of the additional lens in Figure 1 as 43 (not 44) is found on "Amended Page (6)", filed with the application. This paragraph (lines 13-19) corrects several errors found on original page 6. Lens 22 is shown in Figure 1, in the upper right corner.

The claims of record have been canceled and replaced by a new set of claims without reference numbers. Included in the new set of claims are claims which were in the original PCT application as filed.

Claims 1-3 and 6-8 have been rejected under 35 USC 102(e) over Ebihara.

The Office Action alleges that the elements of the invention are shown in Figure 2 of Ebihara and the related specification, and in particular, that "Ebihara teaches a light source, from which a lighting beam path originates impinging on a measuring point on the object (Figure 2, element 21), (column 4, lines 60-61), as well as an optical system for capturing and imaging a measuring point on at least one optical sensor, such as CCD sensor (Figure 2, element 40), (column 5, lines 32-40), whereby the optical system consists at least one movable lens group containing measuring lenses (Figure 2, element 31), (column 5, lines 21-22), at least one additional lens passed through by the lighting beam are arranged (Figure 2, elements 26a, 26b), (column 4, lines 66-67), whereby a first beam path originating from the measuring lens runs on the object side in parallel to the beam path originating from the at least one additional lens (Figure 2, elements L1, 22, 22b, 25a, 25b)."

Applicant believes that this is not a correct

interpretation of the reference. First, element 21 is not the object being measured, but is a *laser light source* (col. 4, line 60); the object being measured is designated object 6 (col. 4, line 46). The light beam from the laser light source is broken up into two beams by mirrors and lenses, the two beams impinging on the object. Light from the measuring point 28 on object 6 passes through lens system 31 and is reflected by mirror 32 to sensor 40.

For the illumination, a Galilean optical system 26a, 26b is used, and this system is totally independent of the lens group 31. This is contrary to the invention, in which a common seat holds a plurality of measuring lenses, including a lens in the first beam path and a lens in the second beam path.

Moreover, the beams which impinge on point 28 of object 6 are not parallel to the measuring beam along axis L1. In contrast, the second light beam of the invention is parallel to the first light beam impinging on the measuring point on the object.

From Figure 2 of Ebihara, it is clear that at the time the invention was made, one of ordinary skill would have proceeded from the assumption that the lenses for illuminating the object were to be fully independent of the lenses for measuring. Thus, Ebihara does not disclose or suggest the invention, utilizing a simple construction in which the illumination does not lead to interfering reflexes.

Withdrawal of this rejection is requested.

Claim 4 has been rejected under 35 USC 103(a) over Ebihara in view of Tiziani. The patent to Ebihara has been discussed in detail hereinabove.

Tiziani discloses an optical method and a sensor for winning a 3D point cloud, in which a first zoom system is assigned to a light source and a second zoom system is assigned to a CCD camera, both zoom systems having the same

zoom factor. The zoom systems are graphically arranged in a box but this does not mean that the lenses extend from the same holding means. There is no disclosure or suggestion of aligning at the object side, a beam originating from a measuring lens parallel to a lighting beam, where the lenses optically influencing the measuring beam and lighting beam are mounted in common seats, which are movable relative to each other.

Withdrawal of this rejection is requested.

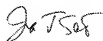
Claim 5 has been rejected under 35 USC 103(a) over Ebihara in view of Nose et al. The patent to Ebihara has been discussed in detail hereinabove.

Nose et al does not provide any holding means from which at least two lenses originate, and through which two separate beams extend in parallel to each other. As a result, a combination of Ebihara and Nose et al cannot suggest the invention as claimed. Rather, Nose et al emphasizes that prior to the invention, one skilled in the art would have assumed that lenses through which one beam passes are to be mounted separately from lenses through which a second beam passes.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Ira J. Schultz". The signature is stylized with a large, looped initial "I" and a cursive "S" at the end.

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